

REMARKS

This is intended as a full and complete response to the Office Action dated July 30, 2009, having a shortened statutory period for response set to expire on October 30, 2009. Please reconsider the claims pending in the application for reasons discussed herein.

Claims 4-17 are rejected by the Examiner.

Claims 4-17 remain pending in the application after entry of this response. Claim 10 has been amended. No new matter has been added by the amendment.

Claim Rejections Under 35 USC § 102

Claims 4-17 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,844,397 to *Konecny*. Applicant respectfully traverses the rejection. *Konecny* does not teach, suggest, or disclose means for generating waveforms in which the voltage varies voltage substantially smoothly during each transition between an upper voltage level and a lower voltage level, as recited in claim 4. *Konecny* states at column 4, line 67 to column 5, line 9 that connecting the output of a rectifier 604 to a smoothing circuit 606:

reduces ripples in the voltage provided by the rectifier 604. An inverter 608 receives the smoothed D.C. signal from the smoothing circuit 606 and provides a three phase signal to the motor 600 via a transformer 610. The inverter 608 provides a PWM signal, which may be varied according to inputs from a controller 612, thereby adjusting the frequency of rotation of the motor 600.

Thus, as stated in the abstract, *Konecny* teaches that "the variable speed PWM inverter provides a rectangular PWM signal that may be varied according to inputs from a controller to adjust the speed of the motor". Whilst such a rectangular PWM voltage signal may have a reduced ripple, the PWM voltage waveform still exhibits discrete steps or jumps in voltage between upper and lower voltage levels. Therefore, claim 4 and its dependents are not anticipated by *Konecny*.

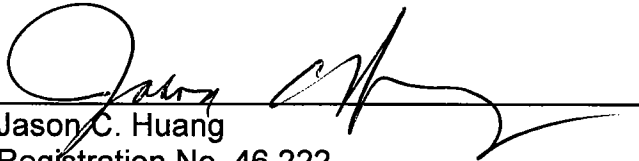
Further, *Konecny* does not teach or suggest any reason to filter or smooth the rectangular PWM signal at the output of the inverter 608 in any way and one skilled in

the art would not, therefore, be motivated to filter or smooth the rectangular PWM signal of *Konecny* to produce waveforms in which the voltage varies substantially smoothly during each transition between an upper voltage level and a lower voltage level, as recited in claim 4.

Conclusion

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



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